

# DUANE E. WALISER Jet Propulsion Laboratory, MS 183-400 California Institute of Technology 4800 Oak Grove Drive, Pasadena, CA 91109

http://earth.jpl.nasa.gov/dwaliser duane.waliser@jpl.nasa.gov 818-393-4094;

# INTERESTS & EXPERTISE

Earth System Science, Applications & Modeling, Satellite Mission Formulation, Climate Dynamics and Change, Global Water Cycle & Hydrometeorology, Subseasonal-to-Seasonal Prediction, Weather-Climate Linkages & Extremes

### **EDUCATION**

B.S. Physics Oregon State University, 1985.B.S. Computer Science Oregon State University, 1985.

M.S. Physics University of California, San Diego (UCSD), 1987. Ph.D. Physical Oceanography Scripps Institution of Oceanography, UCSD, 1992.

### PROFESSIONAL EXPERIENCE

2010 - Present: Chief Scientist, Earth Science and Technology Directorate, Jet Propulsion Laboratory, Pasadena, CA.

2007 - Present: Senior Research Scientist, Science Division, Jet Propulsion Laboratory (JPL), Pasadena, CA.

<u>2007 - Present:</u> Adjunct Professor in the Department of Atmospheric and Oceanic Sciences and Fellow of the Joint Institute for Regional Earth System Science and Engineering, U. California, Los Angeles, CA.

2004 - Present: Visiting Associate, Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA.

2004 - 2007: Principal Scientist, Water and Carbon Cycle Group, Science Division, JPL, Pasadena, CA.

<u>1999 - 2004</u> Associate Professor, Institute for Terrestrial and Planetary Atmospheres (ITPA), Marine Science Research Center (MSRC), State University of New York (SUNY), Stony Brook.

1993 - 1999: Assistant Professor, IPTA, MSRC, SUNY, Stony Brook.

1992 - 1993: Postdoctoral Associate, Atmospheric Sciences, University of California, Los Angeles, CA.

## **PUBLICATIONS & BOOKS**

Over 240 Peer-Reviewed Publications, H-Index 80

Lau, W. K. M. and D. E. Waliser, Eds., 2005: <u>Intraseasonal Variability of the Atmosphere-Ocean Climate System,</u> Springer, Heidelberg, Germany, 474.

Lau, W. K. M. and D. E. Waliser, Eds., 2011: <u>Intraseasonal Variability of the Atmosphere-Ocean Climate System,</u> 2<sup>nd</sup> Edition, Springer, Heidelberg, Germany, pp. 613.

Ralph, F.M., M. D. Dettinger, J. J. Rutz, D. E. Waliser, Eds., 2020. Atmospheric Rivers, Springer, Switzerland, pp. 252.

### **SELECTED HONORS & AWARDS**

JPL Magellan Award, Advancing Science of Atmospheric River, 2018.

California Department of Water Resources Climate Science Service Award, 2017.

NASA Group Achievement Award, obs4MIPs, 2015.

JPL People Leadership Award, 2014.

Fellow, American Meteorological Society, 2014.

JPL Magellan Award, Earth Science and Technology Leadership, Science Leadership, 2012.

NASA Exceptional Achievement Award, 2010.

NASA Group Achievement Award, Aura Microwave Limb Sounder Science Team, 2006.

NOAA Postdoctoral Fellowship for Climate and Global Change, 1992-93.

NASA Graduate Student Fellowship Recipient, 1988-1991.

### PROFESSIONAL AFFILIATIONS

Member, American Geophysical Union Member. American Meteorological Society

### SELECTED PROFESSIONAL SERVICE & LEADERSHIP

National Academy of Sciences, Engineering and Medicine (NASEM) Activities

- Member, Committee on Earth Science and Applications from Space (CESAS), 2018-present.
- Member, Board on Atmospheric Science and Climate (BASC), 2016-present.
- Member, Study on Lessons-Learned in the Implementation of NASA's Earth Venture Class, 2022.
- Member, Study on Next Generation Earth Systems Science at the National Science Foundation, 2021.
- Member, Weather and Air Quality Panel, Earth Science and Applications from Space Decadal Survey, 2017.
- Member, Study on US Research Agenda for Subseasonal to Seasonal Prediction, 2016.
- Member, Study on Intraseasonal and Interannual Climate Predictability, 2010.
- Co-Chair, Developing a Continuity Framework for Satellite Observations of Climate, Keck Institute of Space Studies, Caltech & JPL, 2022.

Member, Science and Applications Leadership Team, Clouds, Convection & Precipitation and Aerosol Earth Science and Applications Decadal Survey Designated Observable GSFC-led Mission Study for NASA, 2018- present.

Contributing Author, Climate Change Science Report, U.S. National Climate Assessment, 2016-2017.

Member, World Climate Research Program (WCRP) / World Weather Research Program (WWRP) Subseasonal to Seasonal (S2S) Project Steering Group, 2011-2019.

Co-Chair, with P. Gleckler, World Meteorological Organization (WMO) World Climate Research Program (WCRP) Data Advisory Council (WDAC) obs4MIPs Task Team, 2014-2020.

Co-chair, with Mitch Moncrieff, WMO joint WCRP/WWRP – THORPEX Program Year of Tropical Convection (YOTC) Activity, 2006–2015.

Co-chair, with Matthew Wheeler, WCRP/WWRP, Madden Julian Oscillation (MJO) Task Force, 2009-2011.

Co-chair, with K. Sperber, US CLIVAR Madden-Julian Oscillation Working (MJO) Group, 2006–2009.

### **MENTORING**

High School and Undergraduate Students – 13 Graduate Students – 19 Postdoctoral Scientists – 24

### COMPETITIVE RESEARCH FUNDING

**Principle Investigator Awards** 

- National Aeronautics and Space Administration (NASA) \$10M
- California Department of Water Resources (CA DWR) \$2.6M
- National Science Foundation (NSF) \$1.3M
- National Oceanographic and Atmospheric Administration (NOAA) \$750k
- Office of Naval Research (ONR) \$800k

Co-Principle Investigator Awards

NASA \$5M, NSF \$1.9M; NOAA \$3.5M; ONR 7.5M